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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/891,235	06/27/2001	Takahiro Hosomi	053969-0128	1598
22428	7590	11/23/2004	EXAMINER NGUYEN, DUNG X	
FOLEY AND LARDNER SUITE 500 3000 K STREET NW WASHINGTON, DC 20007			ART UNIT 2631	PAPER NUMBER

DATE MAILED: 11/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/891,235

Applicant(s)

HOSOMI, TAKAHIRO

Examiner

Dung X Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 June 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 9 - 13, 20, 21, and 22 is/are rejected.
- 7) ☒ Claim(s) 3 - 7 and 14 - 19 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|-------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>27 June 2001</u> | 6) <input checked="" type="checkbox"/> Other: <u>See Continuation Sheet</u> |

Continuation of Attachment(s) 6). Other: (PTO-1499) Mail Date: 22 May 2002, 31 October 2003, and 26 March 2003 .

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. **Claims 1 and 12 are rejected** under 35 U.S.C. 102(b) as being anticipated Hanly (US patent # 5,697,053).

Regarding claim 1, Hanly discloses a spectrum communication system comprising means for controlling a transmission bandwidth and a transmission power of counterpart equipment upon a communication quality (column 7, lines 1 – 25).

Regarding claim 12, the limitations are analyzed in the same manner set forth as claim 1.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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4. **Claims 2 and 13 are rejected** under 35 U.S.C. 103(a) as being unpatentable over Hanly (US patent # 5,697,053), and further in view of Japanese patent # JP 6046033 A submitted by applicant.

Regarding claim 2, as followed by the limitations analyzed in claim 1, Hanly differs from the instant claimed invention that it does not show that wherein the communication quality is expressed by a reception error ratio.

However, Japanese patent # JP 6046033 A submitted by applicant discloses that wherein the communication quality is expressed by a reception error ratio (translated abstract).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine Hanly and Japanese patent # JP 6046033 A submitted by applicant as providing wherein the communication quality is expressed by a reception error ratio for furthermore expressing the detail of the invention.

Regarding claim 13, the limitations are analyzed in the same manner set forth as claim 2.

5. **Claims 2 and 13 are also rejected** under 35 U.S.C. 103(a) as being unpatentable over Hanly (US patent # 5,697,053), and further in view of Yanmaura et al. (US patent # 5,321,721) submitted by applicant.

Regarding claim 2, as followed by the limitations analyzed in claim 1, Hanly differs from the instant claimed invention that it does not show that wherein the communication quality is expressed by a reception error ratio.

However, Yanmaura et al. further discloses that wherein the communication quality is expressed by a reception bit error ratio (abstract)

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine Hanly and Yanmaura et al. as providing wherein the

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communication quality is expressed by a reception error ratio for furthermore expressing the detail of the invention.

Regarding claim 12, the limitations are analyzed in the same manner set forth as claim

6. **Claims 9 and 20 are rejected** under 35 U.S.C. 103(a) as being unpatentable over Hanly (US patent # 5,697,053), and further in view of Sun et al. (US patent # 6,510,147 B1).

Regarding claim 2, as followed by the limitations analyzed in claim 1, Hanly differs from the instant claimed invention that it does not show that wherein the control means varies the transmission bandwidth by varying a chip rate.

However, Sun et al. discloses that wherein the control means varies the transmission bandwidth by varying a chip rate (column 1, line 52 to column 2, line 26).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine Hanhly and Sun et al. as that wherein the control means varies the transmission bandwidth by varying a chip rate for adapting transmitting narrow-band signals to transmitting wideband signals (column 1, lines 13 – 17 of Sun et al.).

Regarding claim 20, as followed by the limitations analyzed in claim 12, the limitations are analyzed in the same manner set forth as claim 9.

7. **Claims 10 and 21 are rejected** under 35 U.S.C. 103(a) as being unpatentable over Hanly (US patent # 5,697,053, and further in view of Lee et al. (US patent application # 2003/0086478 A1).

Regarding claim 10, as followed by the limitations analyzed in claim 1, Hanly differs from the instant claimed invention that it does not show that wherein the control means varies the transmission bandwidth by varying a data rate.

However, Lee et al. discloses that wherein the control means varies the transmission bandwidth by varying a data rate (page 2, first column, paragraph # 15 and page 3, second column 1, line 52 to column 2, lines 10 – 17).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine Hanhly and Lee et al. as that wherein the control means varies the transmission bandwidth by varying a data for improving user connectivity as data can be transmitted over existing band-limited links (page 1, paragraph 2 of Lee et al.)

Regarding claim 21, as followed by the limitations analyzed in claim 12, the limitations are analyzed in the same manner set forth as claim 10.

8. **Claims 11 and 22 are rejected** under 35 U.S.C. 103(a) as being unpatentable over Hanly (US patent # 5,697,053), and further in view of Bishop et al. (US patent # 6,377,782 B1).

Regarding claim 11, as followed by the limitations analyzed in claim 1, Hanly differs from the instant claimed invention that it does not show that wherein the control means varies the transmission bandwidth by varying a bit number of an error correction code.

However, Bishop et al. discloses that wherein the control means varies the transmission bandwidth by varying a bit number of an error correction code (figure 7 and its description from column 15, line 13 to column 16, line 38 and column 17, lines 15 – 46).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine Hanhly and Bishop et al. as that wherein the control means varies the transmission bandwidth by varying a bit number of an error correction code for improving the transmission and reception of data via a linear broadband network (column 1, lines 26 – 28 of Bishop et al.)

Regarding claim 22, as followed by the limitations analyzed in claim 12, the limitations are analyzed in the same manner set forth as claim 11.

Allowable Subject Matter

9. **Claims 3 – 8 and 14 – 19 are objected** to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US Documents:

Seo (US patent # 6,738,367 B1) discloses a method and its corresponding apparatus for receiving signals in a base station for cellular radio telecommunication.

Feeney (US patent # 6,144,841) discloses a method and its corresponding apparatus for managing forward link power control within code-division multiple access mobile telephone communication network.

Other Publications:

L. Vandendorpe in "Multitone Spread Spectrum Multiple Access in a Multipath Rician Fading Channel", IEEE Transactions on Vehicular Technology, vol. 44, no. 2, May 1995, pp. 327 – 337.

Contact Information

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dung X. Nguyen whose telephone number is (571) 272-3010. The examiner can normally be reached on Monday through Friday from 8:00 AM to 17:00 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Ghayour Mohammad H. can be reached on (571) 272-3021. The fax phone numbers for this group is (571) 273-3021.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2600.

DXN

October 18, 2004


MOHAMMED GHAYOUR
SUPERVISORY PATENT EXAMINER